

**MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY
AIR QUALITY DIVISION**

JANUARY 20, 2021

**PERMIT TO INSTALL
89-20**

**ISSUED TO
BIEWER SAWMILL, INC.**

**LOCATED AT
6251 GERWOUDE DRIVE
McBAIN, MICHIGAN 49657**

**IN THE COUNTY OF
MISSAUKEE**

**STATE REGISTRATION NUMBER
N1722**

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environment, Great Lakes, and Energy. This permit is hereby issued in accordance with and subject to Section 5505(1) of Article II, Chapter I, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Pursuant to Air Pollution Control Rule 336.1201(1), this permit constitutes the permittee's authority to install the identified emission unit(s) in accordance with all administrative rules of the Department and the attached conditions. Operation of the emission unit(s) identified in this Permit to Install is allowed pursuant to Rule 336.1201(6).

DATE OF RECEIPT OF ALL INFORMATION REQUIRED BY RULE 203: January 8, 2021	
DATE PERMIT TO INSTALL APPROVED: January 20, 2021	SIGNATURE:
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

PERMIT TO INSTALL

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COMMON ACRONYMS

AQD	Air Quality Division
BACT	Best Available Control Technology
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
COMS	Continuous Opacity Monitoring System
Department/department/EGLE	Michigan Department of Environment, Great Lakes, and Energy
EU	Emission Unit
FG	Flexible Group
GACS	Gallons of Applied Coating Solids
GC	General Condition
GHGs	Greenhouse Gases
HVLP	High Volume Low Pressure*
ID	Identification
IRSL	Initial Risk Screening Level
ITSL	Initial Threshold Screening Level
LAER	Lowest Achievable Emission Rate
MACT	Maximum Achievable Control Technology
MAERS	Michigan Air Emissions Reporting System
MAP	Malfunction Abatement Plan
MSDS	Material Safety Data Sheet
NA	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standard for Hazardous Air Pollutants
NSPS	New Source Performance Standards
NSR	New Source Review
PS	Performance Specification
PSD	Prevention of Significant Deterioration
PTE	Permanent Total Enclosure
PTI	Permit to Install
RACT	Reasonable Available Control Technology
ROP	Renewable Operating Permit
SC	Special Condition
SCR	Selective Catalytic Reduction
SNCR	Selective Non-Catalytic Reduction
SRN	State Registration Number
TBD	To Be Determined
TEQ	Toxicity Equivalence Quotient
USEPA/EPA	United States Environmental Protection Agency
VE	Visible Emissions

*For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 psig.

POLLUTANT / MEASUREMENT ABBREVIATIONS

acfm	Actual cubic feet per minute
BTU	British Thermal Unit
°C	Degrees Celsius
CO	Carbon Monoxide
CO ₂ e	Carbon Dioxide Equivalent
dscf	Dry standard cubic foot
dscm	Dry standard cubic meter
°F	Degrees Fahrenheit
gr	Grains
HAP	Hazardous Air Pollutant
Hg	Mercury
hr	Hour
HP	Horsepower
H ₂ S	Hydrogen Sulfide
kW	Kilowatt
lb	Pound
m	Meter
mg	Milligram
mm	Millimeter
MM	Million
MW	Megawatts
NMOC	Non-Methane Organic Compounds
NO _x	Oxides of Nitrogen
ng	Nanogram
PM	Particulate Matter
PM10	Particulate Matter equal to or less than 10 microns in diameter
PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter
pph	Pounds per hour
ppm	Parts per million
ppmv	Parts per million by volume
ppmw	Parts per million by weight
psia	Pounds per square inch absolute
psig	Pounds per square inch gauge
scf	Standard cubic feet
sec	Seconds
SO ₂	Sulfur Dioxide
TAC	Toxic Air Contaminant
Temp	Temperature
THC	Total Hydrocarbons
tpy	Tons per year
µg	Microgram
µm	Micrometer or Micron
VOC	Volatile Organic Compounds
yr	Year

GENERAL CONDITIONS

1. The process or process equipment covered by this permit shall not be reconstructed, relocated, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. **(R 336.1201(1))**
2. If the installation, construction, reconstruction, relocation, or modification of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the permittee or the designated authorized agent shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environment, Great Lakes, and Energy, P.O. Box 30260, Lansing, Michigan 48909-7760, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install. **(R 336.1201(4))**
3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to Rule 210 (R 336.1210), operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. **(R 336.1201(6)(b))**
4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. **(R 336.1201(8), Section 5510 of Act 451, PA 1994)**
5. The terms and conditions of this Permit to Install shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to Rule 219 and the Department approves the request, this permit will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b), and (c) of Rule 219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environment, Great Lakes, and Energy. **(R 336.1219)**
6. Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. **(R 336.1901)**
7. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the Department. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal condition or malfunction has been corrected, or within 30 days of discovery of the abnormal condition or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5). **(R 336.1912)**
8. Approval of this permit does not exempt the permittee from complying with any future applicable requirements which may be promulgated under Part 55 of 1994 PA 451, as amended or the Federal Clean Air Act.
9. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.
10. Operation of this equipment may be subject to other requirements of Part 55 of 1994 PA 451, as amended and the rules promulgated thereunder.

11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of Rule 301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with Rule 303 (R 336.1303). **(R 336.1301)**
 - a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
 - b) A visible emission limit specified by an applicable federal new source performance standard.
 - c) A visible emission limit specified as a condition of this Permit to Install.
12. Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in Rule 370(2). **(R 336.1370)**
13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001. **(R 336.2001)**

EMISSION UNIT SPECIAL CONDITIONS

EMISSION UNIT SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date / Modification Date	Flexible Group ID
EUWOODBOILER	Wood fired boiler, 60.4 MMBtu/hr heat input, 40,000 lb/hr steam output; two fuel storage silos, multiple cyclone precleaner and electrostatic precipitator for emission control.	12/30/2005	NA
EUPLANER20	Dimensions finisher on post kiln lumber	TBD	FGPLANERSYS20
EUENDTRIMMER20	Size reduction lumber saw	TBD	FGPLANERSYS20
EUBLOCKGRDR20	Size reduction dried lumber hog	TBD	FGPLANERSYS20

Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1291.

**EUWOODBOILER
 EMISSION UNIT CONDITIONS**

DESCRIPTION

Wood fired boiler, 60.4 MMBtu/hr heat input, 40,000 lb/hr steam output; two fuel storage silos, multiple cyclone precleaner and electrostatic precipitator for emission control.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Multiple cyclone precleaner and electrostatic precipitator

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. PM	0.10 lbs per 1000 lbs exhaust gas (corrected to 50% excess air)	Hourly	EUWOODBOILER	SC V.1	R 336.1331
2. PM10	0.10 lbs per 1000 lbs exhaust gas (corrected to 50% excess air)	Hourly	EUWOODBOILER	SC V.1	R 336.1331
3. PM	6.04 pph	Hourly	EUWOODBOILER	SC VI.3	R 336.1205(1)(a) & (3)
4. PM10	6.04 pph	Hourly	EUWOODBOILER	SC VI.3	R 336.1205(1)(a) & (3)
5. PM	0.10 lbs/MMBTU	Hourly	EUWOODBOILER	SC VI.3	40 CFR Part 60 Subpart Dc

II. MATERIAL LIMIT(S)

Material	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Wood Fuel	9.7 tons/hour	Hourly	EUWOODBOILER	SC VI.2	R 336.1205, R 336.1225 R 336.1331

2. The permittee shall not burn in EUWOODBOILER any wood, wood residue, or wood waste which is painted or treated with wood preservatives (including but not limited to creosote, pentachlorophenol, or copper chromium arsenate) or any other waste materials not previously identified. **(R 336.1225)**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EUWOODBOILER unless an acceptable plan that describes how emissions will be minimized during all startups, shutdowns and malfunctions has been submitted to the AQD District Supervisor. The plan shall incorporate procedures recommended by the equipment manufacturer, if available, as well as incorporating standard industry practices. **(R 336.1911, R 336.1912)**

2. The permittee shall not operate EUWOODBOILER unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the electrostatic precipitator emission control system, has been submitted and is implemented and maintained. If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1205, R 336.1331, R 336.1901)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate EUWOODBOILER unless the multiple cyclone precleaner and electrostatic precipitator are installed, maintained, and operated in a satisfactory manner. **(R 336.1205, R 336.1331, R 336.1901)**
2. The permittee shall install, calibrate, maintain, and operate in a satisfactory manner a device to monitor the visible emissions on a continuous basis. The permittee shall install the continuous opacity monitor system (COM) to meet timelines, requirements, and reporting details in Appendix A. **(R 336.1205, R 336.1301, R 336.1331, 40 CFR 60.43c(c))**
3. The permittee shall install, calibrate, maintain, and operate in a satisfactory manner a device to monitor and record the wood fuel usage for EUWOODBOILER on a daily basis. **(R 336.1205(1)(a) & (3), 40 CFR Part 60 Subparts A & Dc)**

V. TESTING/SAMPLING

1. Upon request of the AQD District Supervisor, the permittee shall verify PM & PM10 emission rates from EUWOODBOILER by testing at the owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in 40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules & 40 CFR Part 51, Appendix M. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1331, R 336.1910, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d), 40 CFR 60 Subpart Dc)**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. **(R 336.1205(1)(a) & (3))**
2. The permittee shall monitor and record the wood fuel usage for EUWOODBOILER on a daily basis. The permittee shall keep daily wood fuel usage records, in a format acceptable to the AQD District Supervisor, indicating the amount of wood fuel used, in pounds, on an average hourly basis. The records must indicate the total amount of wood fuel used in EUWOODBOILER. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205(1)(a) & (3), R 336.1331, 40 CFR Part 60 Subparts A & Dc)**

- The permittee shall keep, in a format acceptable to the AQD District Supervisor, average hourly PM and PM10 emission records for EUWOODBOILER calculated on a daily basis using the total daily wood fuel usage rate and daily hours of operation. All records shall be kept on file for a period and made available to the Department upon request. **(R 336.1205(1)(a) & (3), R 336.1331, 40 CFR 52.21(c) & (d), 40 CFR Part 60 Subparts A & Dc)**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVWOODBOILER	42	61	40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

- The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and Dc, as they apply to EUWOODBOILER. **(40 CFR Part 60 Subparts A & Dc)**

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

FLEXIBLE GROUP SPECIAL CONDITIONS

FLEXIBLE GROUP SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGPLANERSYS20	New lumber saws and planer operations controlled by a new cyclone. Planer mill capacity is 200,000 MBF/yr of finished lumber. MBF is equivalent to one thousand board feet.	EUPLANER20 EUENDTRIMMER20 EUBLOCKGRDR20

**FGPLANERSYS20
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

New lumber saws and planer operations controlled by a new cyclone. Planer mill capacity is 200,000 MBF/yr of finished lumber. MBF is equivalent to one thousand board feet.

Emission Unit: EUPLANER20, EUENDTRIMMER20, EUBLOCKGRDR20

POLLUTION CONTROL EQUIPMENT

New Cyclone/filter system

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. PM	0.01 gr/dscf of exhaust air	Hourly	FGPLANERSYS20	SC VI.2	R 336.1331(1)(c)
2. PM	1.36 pph	Hourly	FGPLANERSYS20	SC VI.2	R 336.1331
3. PM10	0.59 pph	Hourly	FGPLANERSYS20	SC VI.2	40 CFR 52.21(c) & (d)
4. PM2.5	0.45 pph	Hourly	FGPLANERSYS20	SC VI.2	40 CFR 52.21(c) & (d)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate FGPLANERSYS20 unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the cyclone/filter system, has been submitted within 90 days of permit issuance, and is implemented and maintained. The MAP shall, at a minimum, specify the following:
 - a) A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
 - b) An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
 - c) A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1331, R 336.1910, R 336.1911, 40 CFR 52.21(c) & (d))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate FGPLANERSYS20 unless the cyclone/filter system is installed, maintained, and operated in a satisfactory manner per the manufacture's specifications. Satisfactory operation includes but is not limited to maintaining the cyclone as specified by the malfunction abatement plan required by SC III.1. **(R 336.1205, R 336.1301, R 336.1331, R 336.1910)**

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1205, R 336.1224, R 336.1225, R 336.1702)**
2. The permittee shall keep a log of all inspections and maintenance performed on any air emission control system associated with FGPLANERSYS20 (pursuant to SC III.1). The permittee shall maintain this record on site and make it available to the Department upon request. **(R 336.1205, R 336.1301, R 336.1331, R 336.1911, 40 CFR 52.21(c) & (d))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

APPENDIX A

Continuous Opacity Monitoring System (COMS) Requirements

For an existing COMS: If the permittee has satisfied the installation and performance specification requirements, Items 1 – 4 do not apply.

1. Within 30 calendar days of the issuance of this permit, the permittee shall submit two copies of a Monitoring Plan to the AQD, for review and approval. The Monitoring Plan shall include drawings or specifications showing proposed locations and descriptions of the required COMS.
2. Within 150 calendar days of the issuance of this permit, the permittee shall submit two copies of a complete test plan for the COMS to the AQD for approval.
3. Within 180 calendar days of the issuance of this permit, the permittee shall complete the installation and testing of the COMS.
4. Within 60 days of completion of testing, the permittee shall submit to the AQD two copies of the final report demonstrating the COMS complies with the requirements of Performance Specification (PS) 1.
5. The span value shall be 2.0 times the lowest emission standard or as specified in the federal regulations.
6. The COMS shall be installed, calibrated, maintained, and operated in accordance with the procedures set forth in 40 CFR 60.13 and PS 1 of Appendix B, 40 CFR Part 60.
7. The permittee shall perform the COMS quality assurance set forth in 40 CFR Part 60, Appendix F, Procedure 3, or a method acceptable to AQD. Within 30 days after the completion of the Procedure 3, the results shall be submitted to the AQD.
8. In accordance with 40 CFR 60.7(c) and (d), the permittee shall submit two copies of an excess emission report (EER) and summary report in an acceptable format to Air Quality Division, within 30 days following the end of each calendar quarter. The Summary Report shall follow the format of Figure 1 in 40 CFR 60.7(d). The EER shall include the following information:
 - a) A report of each exceedance above 20 percent opacity. This includes the date, time, magnitude, cause, and corrective actions of all occurrences during the reporting period.
 - b) A report of all periods of COMS downtime and corrective action.
 - c) A report of the total operating time of the EUWOODBOILER during the reporting period.
 - d) If no exceedances or COMS downtime occurred during the reporting period, the permittee shall report that fact.

All monitoring data shall be kept on file for a period of at least five (5) years and made available to the AQD upon request.